



SEQUENCE LISTING

<110> Eckert, Randal
Qi, Fengxia
Shi, Wenyan
Anderson, Maxwell H.

<120> ANTI-MICROBIAL TARGETING CHIMERIC PHARMACEUTICAL

<130> 02307k-186431US

<140> US 10/706,391

<141> 2003-11-12

<150> US 09/378,577

<151> 1999-08-20

<150> US 09/910,358

<151> 2001-07-19

<150> US 10/077,624

<151> 2002-02-14

<160> 71

<170> PatentIn version 3.5

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<212> DNA

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<223> DNA encoding histatin 5 fusion to VH SWLA3

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| tccagtgtga tagccacgct aagcggcacc acggatataa gcggaagttc caccagaagc | 120 |
| accactcgca cagaggatac tctggtggcg gtggctcggg cggagggtggg tcgggtggcg | 180 |
| gcggatccga cgtgaagctt gtggagtctg ggggaggctt agtgaaccct ggagggtccc | 240 |
| tgaaactctc ctgtgcagcc tctggattca ctttcagtag ctataccatg tcttgggttc | 300 |
| gccagactcc ggagaagagg ctggagtggg tcgcatccat tagtagtggt ggtacttaca | 360 |
| cctactatcc agacagtgtg aagggccgat tcaccatctc cagagacaat gccaagaaca | 420 |
| ccctgtacct gcaaatgacc agtctgaagt ctgaggacac agccatgtat tactgttcaa | 480 |
| gagatgacgg ctccctacggc tcctattact atgctatgga ctactggggt caaggaacct | 540 |
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| Asp | Ser | His | Ala | Lys | Arg | His | His | Gly | Tyr | Lys | Arg | Lys | Phe | His | Glu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Lys | His | His | Ser | His | Arg | Gly | Tyr | Ser | Gly | Gly | Gly | Gly | Ser | Gly | Gly |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gly | Gly | Ser | Gly | Gly | Gly | Gly | Ser | Asp | Val | Lys | Leu | Val | Glu | Ser | Gly |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Gly | Gly | Leu | Val | Asn | Pro | Gly | Gly | Ser | Leu | Lys | Leu | Ser | Cys | Ala | Ala |
| | | 50 | | | | 55 | | | | | 60 | | | | |
| Ser | Gly | Phe | Thr | Phe | Ser | Ser | Tyr | Thr | Met | Ser | Trp | Val | Arg | Gln | Thr |
| 65 | | | | 70 | | | | | 75 | | | | | 80 | |
| Pro | Glu | Lys | Arg | Leu | Glu | Trp | Val | Ala | Ser | Ile | Ser | Ser | Gly | Gly | Thr |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Tyr | Thr | Tyr | Tyr | Pro | Asp | Ser | Val | Lys | Gly | Arg | Phe | Thr | Ile | Ser | Arg |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Asp | Asn | Ala | Lys | Asn | Thr | Leu | Tyr | Leu | Gln | Met | Thr | Ser | Leu | Lys | Ser |
| | | 115 | | | | 120 | | | | | | 125 | | | |
| Glu | Asp | Thr | Ala | Met | Tyr | Tyr | Cys | Ser | Arg | Asp | Asp | Gly | Ser | Tyr | Gly |
| | 130 | | | | | 135 | | | | 140 | | | | | |
| Ser | Tyr | Tyr | Tyr | Ala | Met | Asp | Tyr | Trp | Gly | Gln | Gly | Thr | Ser | Val | Thr |
| 145 | | | | 150 | | | | | 155 | | | | | | 160 |
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| tccagtgtaa gcggctgttt aaggagctca agttcagcct gcgcaagtac tctggtggcg | 120 |
| gtggctcggg cggaggtggg tcgggtggcg gcggatccga cgtgaagctt gtggagtctg | 180 |
| ggggaggctt agtgaaccct ggaggggtccc tgaaactctc ctgtgcagcc tctggattca | 240 |
| ctttcagtag ctataccatg tcttggggttc gccagactcc ggagaagagg ctggagtggg | 300 |
| tcgcatccat tagtagtggg ggtacttaca cctactatcc agacagtgtg aagggccgat | 360 |
| tcacqatctc cagagacaat gccagaaca ccctgtacct gcaaatgacc agtctgaagt | 420 |

ctgaggacac agccatgtat tactgttcaa gagatgacgg ctcctacggc tcctattact 480

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| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Gly | Gly | Gly | Ser | Gly | Gly | Gly | Gly | Ser | Gly | Gly | Gly | Gly | Ser | Asp | Val |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Lys | Leu | Val | Glu | Ser | Gly | Gly | Gly | Leu | Val | Asn | Pro | Gly | Gly | Ser | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Lys | Leu | Ser | Cys | Ala | Ala | Ser | Gly | Phe | Thr | Phe | Ser | Ser | Tyr | Thr | Met |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ser | Trp | Val | Arg | Gln | Thr | Pro | Glu | Lys | Arg | Leu | Glu | Trp | Val | Ala | Ser |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | |
| Ile | Ser | Ser | Gly | Gly | Thr | Tyr | Thr | Tyr | Tyr | Pro | Asp | Ser | Val | Lys | Gly |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Arg | Phe | Thr | Ile | Ser | Arg | Asp | Asn | Ala | Lys | Asn | Thr | Leu | Tyr | Leu | Gln |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Met | Thr | Ser | Leu | Lys | Ser | Glu | Asp | Thr | Ala | Met | Tyr | Tyr | Cys | Ser | Arg |
| | | 115 | | | | | 120 | | | | 125 | | | | |
| Asp | Asp | Gly | Ser | Tyr | Gly | Ser | Tyr | Tyr | Tyr | Ala | Met | Asp | Tyr | Trp | Gly |
| | 130 | | | | | 135 | | | | | 140 | | | | |
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| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Lys | His | His | Ser | His | Arg | Gly | Tyr | | | | | | | | |
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<223> dhvar 1 Synthesized using sequential PCR techniques

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Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr
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ggcggatccg acgtgaagct tgtggagtc 89

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aagcaccact cgcacagagg atac 84

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 tgggtcgacw gatggggstg ttgtgctagc tgaggagac 39

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 from PhD-12

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<223> Xaa is Val, Gln or His

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<223> Xaa is Pro or His

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<222> (12)..(12)
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Gly Arg

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Tyr Gly

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<400> 17

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<210> 18
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 <400> 18

Gly Gly Gly Ser Gly Gly Gly Ser
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<210> 19
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<212> DNA
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<210> 23
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<210> 27
<211> 12

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Val Pro His Glu Phe His Ala His Arg Gly Arg Leu
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Gln Pro His Pro His Lys Val His Ser Leu Pro Pro
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His His Leu His Tyr Asn Pro Ala Phe Pro Gly Leu
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Gln Pro Ala Pro Tyr Ile Ser Ser Pro Ser Ala Ser
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Val Arg Leu Pro Leu Trp Leu Pro Ser Leu Asn Glu
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<400> 35

Ala Asn Tyr Phe Leu Pro Pro Val Leu Ser Ser Ser
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Ser His Pro Trp Asn Ala Gln Arg Glu Leu Ser Val
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<212> PRT
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<400> 37

Ser Val Ser Val Gly Met Arg Pro Met Pro Arg Pro
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Trp Thr Pro Leu His Pro Ser Thr Asn Arg Pro Pro
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<400> 39

Ser Val Ser Val Gly Met Lys Pro Ser Pro Arg Pro
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Trp Ala Pro Pro Leu Phe Arg Ser Ser Leu Phe Tyr
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<223> Xaa is any amino acid

<400> 43

Trp Ala Pro Pro Xaa Pro Xaa Ser Ser Leu Phe Tyr
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His His Gly Trp Thr His His Trp Pro Pro Pro Pro
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Ser Tyr Tyr Ser Leu Pro Pro Ile Phe His Ile Pro
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<211> 12

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<223> peptide SA2.7 specific for S. aureus

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Phe Ser Tyr Ser Pro Thr Arg Ala Pro Leu Asn Met
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Ser Xaa Pro Xaa Xaa Met Lys Xaa Ser Xaa Xaa Xaa

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Val Ser Arg His Gln Ser Trp His Pro His Asp Leu
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Asp Tyr Xaa Tyr Arg Gly Leu Pro Arg Xaa Glu Thr
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Ser Val Ser Val Gly Met Lys Pro Ser Pro Arg Pro
1 5 10

<210> 52
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<223> peptide DH5.1 specific for E. coli

<400> 52

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<223> peptide DH5.2 specific for E. coli

<400> 53

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<210> 54

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<223> peptide DH5.3 specific for E. coli

<400> 54

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<400> 55

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| 1 | | | | 5 | | | | | 10 | | |

<210> 56

<211> 12

<212> PRT

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His Asp Arg Tyr His Ile Pro Pro Leu Gln Leu His
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<210> 57

<211> 12

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<223> peptide DH5.6 specific for E. coli

<400> 57

Val Asn Thr Leu Gln Asn Val Arg His Met Ala Ala
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<210> 58

<211> 12

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<223> peptide DH5.7 specific for E. coli

<400> 58

Ser Asn Tyr Met Lys Leu Arg Ala Val Ser Pro Phe
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<210> 59

<211> 12

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<223> peptide DH5.8 specific for E. coli

<400> 59

Asn Leu Gln Met Pro Tyr Ala Trp Arg Thr Glu Phe
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<210> 60

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Gln Lys Pro Leu Thr Gly Pro His Phe Ser Leu Ile
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<223> Design targeting peptide Cat-1

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<210> 62

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<223> Design targeting peptide LPSB-1

<400> 62

Arg Gly Leu Arg Arg Leu Gly Arg Arg Gly Leu Arg Arg Leu Gly Arg
1 5 10 15

<210> 63

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<400> 63

Lys Pro Val Leu Pro Val Leu Pro Val Leu Pro Val Leu
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<210> 64

<211> 16

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Val Leu Arg Ile Ile Arg Ile Ala Val Leu Arg Ile Ile Arg Ile Ala
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<212> PRT

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Leu Pro Glu Thr Gly Gly Ser Gly Gly Ser Leu Pro Glu Thr Gly
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<210> 66

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<212> PRT

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<400> 67

Asp Glu Asp Glu Asp Asp Glu Glu Asp Asp Asp Glu Glu Glu
1 5 10

<210> 68

<211> 15

<212> PRT

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<223> Design targeting peptide Philic-1

<400> 68

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<210> 69

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<223> G10CatC Linker peptide

<400> 69

Gly Gly Ser Gly Gly
1 5

<210> 70

<211> 36

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<213> Artificial sequence

<220>

<223> G10CatC Fusion peptide

<400> 70

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Gly Ser Lys Asn Leu Arg Arg Ile Ile Arg Lys Gly Ile His Ile Ile
20 25 30
Lys Lys Tyr Gly
35

<210> 71

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<212> PRT

<213> Artificial sequence

<220>

<223> G10CatN Fusion peptide

<400> 71

Lys Asn Leu Arg Arg Ile Ile Arg Lys Gly Ile His Ile Ile Lys Lys
1 5 10 15
Tyr Gly Gly Gly Ser Gly Gly Ser Lys Lys His Arg Lys His Arg Lys
20 25 30
His Arg Lys His
35